

350/1 PUBL ACTON RESEARCH CORPORATION

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ARC

PRODUCT DATA

NO. 230

Optical Coatings/Replica Optics/Vacuum UV Test Facilities/Vacuum UV Laser Optics

Vacuum UV Laser Optics

Acton Research Corporation has combined their more than ten years of experience in producing high quality vacuum UV coatings with specialized coating and testing equipment, to now offer high efficiency vacuum UV laser optical components. These components are specifically designed for optimum efficiency in the vacuum UV region and are carefully tested prior to shipment so as to assure customer satisfaction.

VACUUM UV LASER MIRRORS, PARTIALLY TRANSMITTING

Concave MgF₂ Mirrors

Dia. (Inches)	Radius of Curvature (Meters)	Catalog No.	Price
1/2	0.25 to 6.0	LM-230-1C	On Request
3/4	0.25 to 6.0	LM-230-2C	
1	0.25 to 6.0	LM-230-3C	

Concave Fused Silica Mirrors

Dia. (Inches)	Radius of Curvature (Meters)	Catalog No.	Price
1/2	0.25 to 6.0	LS-230-1C	\$155.00
3/4	0.25 to 6.0	LS-230-2C	\$165.00
1	0.25 to 6.0	LS-230-3C	\$175.00

SPECIFICATIONS

- Material - Vacuum UV Grade MgF₂ and Fused Silica
- Surface Finish - Laser grade for minimum light scattering
- Sphericity - Within 1/10 wavelength 5461A
- Back Surface - Polished flat to within 1/2 wavelength 5461A
- Coating - As required for high reflectance and partial transmission in the 1200A - 2000A region

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Flat MgF₂ Mirrors

Dia. (Inches)	Thickness (Inches)	Catalog No.	Price
1/2	1/8	LM-230-1F	On Request
3/4	3/16	LM-230-2F	
1	3/16	LM-230-3F	

Flat Fused Silica Mirrors

Dia. (Inches)	Thickness (Inches)	Catalog No.	Price
1/2	1/8	LS-230-1F	\$140.00
3/4	3/16	LS-230-2F	\$150.00
1	3/16	LS-230-3F	\$160.00

SPECIFICATIONS

- Material - Vacuum UV Grade MgF₂ and Fused Silica
- Surface Finish - Laser grade for minimum light scattering
- Flatness - Within 1/10 wavelength 5461A
- Back Surface - Polished flat to within 1/2 wavelength 5461A
- Coating - As required for high reflectance and partial transmission in the 1200A - 2000A region

PLANE GRATING END REFLECTORS

Dia. (Inches)	Grooves Per Millimeter	Blaze Wavelength	Thickness (Inches)	Coating	Price
1/2	600	2000A	3/16	Al + MgF ₂	\$100.00
1/2	1200	2000A	3/16	Al + MgF ₂	\$150.00
3/4	600	2000A	1/4	Al + MgF ₂	\$125.00
3/4	1200	2000A	1/4	Al + MgF ₂	\$175.00
1	600	2000A	1/4	Al + MgF ₂	\$150.00
1	1200	2000A	1/4	Al + MgF ₂	\$200.00

SPECIFICATIONS

- Blank Material - Fused Silica
- Flatness - Within 1/10 wavelength 5461A
- Back Surface - Ground Flat

HIGH REFLECTANCE VACUUM UV LASER MIRRORS

FRONT SURFACE, CONCAVE SPHERICAL MIRRORS

Dia. (Inches)	Radius of Curvature (Meters)	Catalog No.	Price
½	0.25	C-220-1C	\$100.00
½	0.50	C-220-2C	\$100.00
½	1.0	C-220-3C	\$100.00
½	2.0	C-220-4C	\$100.00
½	3.0	C-220-5C	\$100.00
½	4.0	C-220-6C	\$100.00
¾	0.25	C-220-7C	\$105.00
¾	0.50	C-220-8C	\$105.00
¾	1.0	C-220-9C	\$105.00
¾	2.0	C-220-10C	\$105.00
¾	3.0	C-220-11C	\$105.00
¾	4.0	C-220-12C	\$105.00
1	0.25	C-220-13C	\$110.00
1	0.50	C-220-14C	\$110.00
1	1.0	C-220-15C	\$110.00
1	2.0	C-220-16C	\$110.00
1	3.0	C-220-17C	\$110.00
1	4.0	C-220-18C	\$110.00

Dia. (Inches)	Radius of Curvature (Meters)	Catalog No.	Price
1½	0.25	C-220-19C	\$116.00
1½	0.50	C-220-20C	\$116.00
1½	1.0	C-220-21C	\$116.00
1½	2.0	C-220-22C	\$116.00
1½	3.0	C-220-23C	\$116.00
1½	4.0	C-220-24C	\$116.00
2	0.25	C-220-25C	\$125.00
2	0.50	C-220-26C	\$125.00
2	1.0	C-220-27C	\$125.00
2	2.0	C-220-28C	\$125.00
2	3.0	C-220-29C	\$125.00
2	4.0	C-220-30C	\$125.00
3	0.25	C-220-31C	\$185.00
3	0.50	C-220-32C	\$185.00
3	1.0	C-220-33C	\$185.00
3	2.0	C-220-34C	\$185.00
3	3.0	C-220-35C	\$185.00
3	4.0	C-220-36C	\$185.00

SPECIFICATIONS

- Coating - Al + MgF₂ for optimum reflectance below 2000A
- Material - Fused Silica, Pyrex, Cer-Vit
- Surface Finish - Laser grade for minimum light scattering
- Sphericity - Within 1/10 wavelength 5461A
- Back Surface - Ground Flat

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FRONT SURFACE, FLAT MIRRORS

Size (Inches)	Thickness (Inches)	Catalog No.	Price
½ Dia.	3/16	A-220-1DS	\$ 95.00
¾ Dia.	1/4	A-220-1D	\$100.00
1 Dia.	1/4	A-220-2D	\$105.00
1½ Dia.	3/8	A-220-3D	\$115.00
2 Dia.	3/8	A-220-4D	\$120.00
3 Dia.	1/2	A-220-5D	\$180.00

Size (Inches)	Thickness (Inches)	Catalog No.	Price
½ x ½	3/16	B-220-1RS	\$110.00
¾ x ¾	1/4	B-220-1R	\$120.00
1 x 1	1/4	B-220-2R	\$145.00
1½ x 1½	3/8	B-220-3R	\$260.00
2 x 2	1/2	B-220-4R	\$285.00
3 x 3	3/4	B-220-5R	\$350.00

SPECIFICATIONS

- Coating - Al + MgF₂ for optimum reflectance below 2000A
- Material - Fused Silica, Pyrex, Cer-Vit
- Surface Finish - Laser grade for minimum light scattering
- Flatness - Front surface flat to within 1/10 wavelength 5461A
- Back Surface - Ground Flat

Note: Each of the above listed mirrors is available with a drilled central hole, add \$30.00 to Catalog Price

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